Notice of Allowability	Application No. 09/873,842	Applicant(s) CRONENBERG ET AL.	
	Examiner Brian R. Gordon	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *10-30-03*.
2. ☒ The allowed claim(s) is/are *1-18, 20-21, 24-28, and 31-32*.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

 * Certified copies not received: _____.
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) ☐ hereto or 2) ☒ to Paper No. *11*.
 (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1☒ Notice of References Cited (PTO-892)
2☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
3☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____
4☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5☐ Notice of Informal Patent Application (PTO-152)
6☐ Interview Summary (PTO-413), Paper No._____ .
7☒ Examiner's Amendment/Comment
8☒ Examiner's Statement of Reasons for Allowance
9☐ Other .

DETAILED ACTION

Drawings

1. In order to avoid abandonment, the drawing informalities noted in Paper No. 11, mailed on July 14, 2003, must now be corrected. Correction can only be effected in the manner set forth in the above noted paper.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frank M. Gasparo on January 9, 2004.

The application has been amended as follows:

In the claims:

Cancel claims 29-30 and 33-34.

Amend claims 1, 2, 14, 18, 28, 31, and 32 as follows:

1. [In] A pipette [a mechanism for facilitating the removal of a tip] including: a spring loaded nozzle to which a pipette tip may be removably mounted and a mechanism for facilitating the removal of the tip; said mechanism comprising:

[a spring loaded nozzle to which the tip may be removably mounted;]

a spring loaded ejector sleeve through which said nozzle passes, said sleeve terminating near an end of the nozzle to which the tip is mounted when the sleeve is in

a normal position, the sleeve being moved away from said end of the nozzle against a spring load of the ejector sleeve when the tip is mounted to said nozzle,[;] and

said sleeve including a first latch portion which mates with a second latch portion of said pipette when said sleeve is in a retracted position to which said sleeve is moved when the tip is properly mounted to said nozzle to hold said sleeve in said retracted position against said spring load of said ejector sleeve, and a third latch portion operable to unmate said first and second latch portions, freeing said sleeve to return in response to said spring load of said ejector sleeve to the normal position, the sleeve engaging said tip before reaching said normal position to facilitate the removal of the tip.

2. The mechanism as claimed in claim 1 including an overforce mechanism operable to supplement said spring load of said ejector sleeve in moving said sleeve to said normal position against a stuck tip to further facilitate removal of said tip.

14. A mechanism for facilitating the removal of a pipette tip from a pipette nozzle operable for moving inward as said tip is mounted to said nozzle; said mechanism comprising: [including:]

[a nozzle operable for moving as said tip is mounted to said nozzle;]

an ejector normally biased to a first position near an end of said nozzle to which said tip is mounted, and movable ms said tip is mounted to said nozzle against the bias, the ejector reaching a retracted position when the tip is fully mounted; and

a latch for maintaining the ejector in said retracted position, said latch including a

selectively operable latch release, the bias returning said ejector to said first position when said latch release is operated to facilitate ejection of the tip mounted to the nozzle.

18. A mechanism for facilitating the removal of a pipette tip from a spring loaded pipette nozzle to which a pipette tip may be removably mounted; said mechanism comprising: [including] a mechanism which stores mechanical energy when the tip is mounted to said nozzle, and which is operable to release[s] the stored mechanical energy when the tip is to be removed to facilitate removal [thereof] of said pipette tip, said mechanism for storing includes a latching mechanism operative when said mechanical energy is fully stored, and operative for generating an operator detectable output.

28. A mechanism for facilitating the removal of a pipette tip from a spring loaded pipette nozzle, the nozzle being moved against a spring load when the pipette tip is mounted to the nozzle; said mechanism [,] comprising:

[a spring loaded nozzle, the nozzle being moved against a spring load when the pipette tip is mounted to the nozzle;]

a spring loaded ejector sleeve through which the nozzle passes, the ejector sleeve terminating near an end of the nozzle to which the pipette tip is mounted when the ejector sleeve is in a normal position, the ejector sleeve being moved against a spring load of said ejector sleeve when the pipette tip is mounted to the nozzle; and

said sleeve including a first latch portion which mates with a second latch portion when the ejector sleeve is in a retracted position to which the ejector sleeve is moved when the pipette tip is properly mounted to the nozzle to hold the ejector sleeve in the

retracted position against the spring load of said ejector sleeve, and a third latch portion operable to unmate the first and second latch portions, freeing the ejector sleeve to return in response to the spring load of said ejector sleeve to the normal position, the ejector sleeve engaging the pipette tip before reaching the normal position to facilitate the removal of the pipette tip.

31. A pipette including a spring loaded nozzle to which a pipette tip may be removably mounted and a mechanism for facilitating the removal of the tip; said mechanism comprising:

[a spring loaded nozzle to which the pipette tip may be removably mounted; and]

a spring loaded ejector sleeve through which the nozzle passes;

wherein said spring loaded ejector sleeve is operable to be retracted and advanced to facilitate the removal of a tip mounted to said nozzle.

32. The mechanism as claimed in claim 31, wherein the ejector sleeve includes a first latch portion and further comprising:

a second latch portion which mates with the first latch portion when the ejector sleeve is in a retracted position to which the ejector sleeve is moved when the pipette tip is properly mounted to the nozzle to hold the ejector sleeve in the retracted position against a spring load of said ejector sleeve; and

a third latch portion operable to unmate the first latch portion and the second latch portion, freeing the ejector sleeve to return in response to the spring load of said ejector sleeve to a normal position, the ejector sleeve engaging the pipette tip before reaching the normal position to facilitate the removal of the pipette tip.

Allowable Subject Matter

3. Claims 1-18, 20-21, 24-28, and 31-32 are allowed.

4. The following is an examiner's statement of reasons for allowance: See previous office action.

The prior art of record does not teach nor fairly suggest the inventions of the claims as given below:

1. A pipette including: a spring loaded nozzle to which a pipette tip may be removably mounted and a mechanism for facilitating the removal of the tip; said mechanism comprising:

a spring loaded ejector sleeve through which said nozzle passes, said sleeve terminating near an end of the nozzle to which the tip is mounted when the sleeve is in a normal position, the sleeve being moved away from said end of the nozzle against a spring load of the ejector sleeve when the tip is mounted to said nozzle, and

said sleeve including a first latch portion which mates with a second latch portion of said pipette when said sleeve is in a retracted position to which said sleeve is moved when the tip is properly mounted to said nozzle to hold said sleeve in said retracted position against said spring load of said ejector sleeve, and a third latch portion operable to unmate said first and second latch portions, freeing said sleeve to return in response to said spring load of said ejector sleeve to the normal position, the sleeve engaging said tip before reaching said normal position to facilitate the removal of the tip.

14. A mechanism for facilitating the removal of a pipette tip from a pipette nozzle operable for moving inward as said tip is mounted to said nozzle; said mechanism comprising:

an ejector normally biased to a first position near an end of said nozzle to which said tip is mounted, and movable ms said tip is mounted to said nozzle against the bias, the ejector reaching a retracted position when the tip is fully mounted; and

a latch for maintaining the ejector in said retracted position, said latch including a selectively operable latch release, the bias returning said ejector to said first position when said latch release is operated to facilitate ejection of the tip mounted to the nozzle.

18. A mechanism for facilitating the removal of a pipette tip from a spring loaded pipette nozzle to which a pipette tip may be removably mounted; said mechanism comprising: a mechanism which stores mechanical energy when the tip is mounted to said nozzle, and which is operable to release the stored mechanical energy when the tip is to be removed to facilitate removal of said pipette tip, said mechanism for storing includes a latching mechanism operative when said mechanical energy is fully stored, and operative for generating an operator detectable output.

28. A mechanism for facilitating the removal of a pipette tip from a spring loaded pipette nozzle, the nozzle being moved against a spring load when the pipette tip is mounted to the nozzle; said mechanism comprising:

a spring loaded ejector sleeve through which the nozzle passes, the ejector sleeve terminating near an end of the nozzle to which the pipette tip is mounted when

the ejector sleeve is in a normal position, the ejector sleeve being moved against a spring load of said ejector sleeve when the pipette tip is mounted to the nozzle; and

said sleeve including a first latch portion which mates with a second latch portion when the ejector sleeve is in a retracted position to which the ejector sleeve is moved when the pipette tip is properly mounted to the nozzle to hold the ejector sleeve in the retracted position against the spring load of said ejector sleeve, and a third latch portion operable to unmate the first and second latch portions, freeing the ejector sleeve to return in response to the spring load of said ejector sleeve to the normal position, the ejector sleeve engaging the pipette tip before reaching the normal position to facilitate the removal of the pipette tip.

31. A pipette including a spring loaded nozzle to which a pipette tip may be removably mounted and a mechanism for facilitating the removal of the tip; said mechanism comprising:

a spring loaded ejector sleeve through which the nozzle passes;

wherein said spring loaded ejector sleeve is operable to be retracted and advanced to facilitate the removal of a tip mounted to said nozzle.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

brg

Jill Warden
Supervisory Patent Examiner
Technology Center 1700